

ARAC's Next Generation Modeling System

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ABSTRACT:

ARAC has embarked on a multi-year effort to completely revamp the entire emergency response modeling system. The third-generation ARAC Emergency Response Operating System (ARAC III) will include:

- A consistent, easy-to-use graphical user interface
- Highly automated incident management tools
- Worldwide terrain, land use, and mapping databases
- Robust meteorological data assimilation
- Extensive source terms and model input parameter algorithms
- New high-resolution diagnostic models using continuous-terrain coordinates
- Integration of the Navy Regional Atmospheric Prediction System (NORAPS)
- Generalized visualization tools
- Extensive electronic distribution of ARAC products

We will discuss the system design, hardware and operating system specifications, and the model development and testing program, schedule of implementation, and capabilities relevant to the nuclear power industry.

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